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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/827,022	04/19/2004	B. Raghava Reddy	HES 2003-IP-012018U1	2519

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EXAMINER	
COY, NICOLE A	

ART UNIT	PAPER NUMBER
3672	

MAIL DATE	DELIVERY MODE
05/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/827,022	REDDY ET AL.	
	Examiner	Art Unit	
	Nicole Coy	3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 April 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6 and 8-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,8-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 4, and 8-16 are rejected under 35 U.S.C. 102 (a) and 102(e) as being anticipated by Brothers (US 2003/0121659) or in the alternative obvious over Brothers in view of Krishanan (USP 5,900,451).

With respect to claim 1, Brothers discloses a method of servicing a wellbore in contact with a subterranean formation, comprising: displacing a sealant composition comprising a colloidally stabilized latex into the wellbore; wherein the sealant composition does not comprise an epoxy resin (see paragraph 13); and wherein the colloidally stabilized latex remains substantially stable in the presence of salt (wherein the latex in Brothers would inherently remain stable in the presence of salt because it is stabilized by the third monomer mentioned in paragraph 13).

In the alternative, if it is the specific colloid listed in claim 3 that makes the latex stable in the presence of salt, due to the added protective colloids of Krishnan, the

stabilized latex would remain stable in the presence of salt, as the latex in Brothers in view of Krishnan is substantially similar to the latex claimed.

With respect to claim 2, Brothers discloses that the colloidally stabilized latex comprises: an aliphatic conjugated diene monomer; an additional monomer comprising a non-aromatic unsaturated mono- or di-carboxylic ester monomer, an aromatic unsaturated monomer, a nitrogen-containing monomer, or combinations thereof; and a protective colloid (see paragraph 13).

With respect to claim 4, Brothers discloses that the colloidally stabilized latex comprises a surfactant having ethylenic unsaturation to allow the surfactant to copolymerize with the aliphatic conjugated diene monomer and the additional monomer, thereby forming a polymer having the surfactant in its backbone (see paragraph 18).

With respect to claim 8, monovalent ion, a divalent ion, or combinations thereof are well known salts found in wellbores.

With respect to claim 9, Brothers discloses that the sealant composition comprises salt (see paragraph 24).

With respect to claim 10, Brothers discloses that the sealant compositions comprises fibers, beads or combinations thereof (wherein the polymer would be in the form of fibers or beads).

With respect to claim 11, Brothers discloses that the sealant composition comprises a cement slurry (see paragraph 3).

With respect to claim 12, Brothers in view of Krishnan discloses that the sealant composition is displaced into an annulus and allowed to set.

With respect to claim 13, Brothers discloses that the sealant composition is positioned in the wellbore to isolate the subterranean formation from a portion of the wellbore, to support a conduit in the wellbore, to plug a void or crack in the conduit, to plug a void or crack in a cement sheath disposed in an annulus of the wellbore, to plug an opening between the cement sheath and the conduit, or combinations thereof (see paragraph 3).

With respect to claim 14, Brothers discloses the colloidally stabilized latex comprises a vulcanizable group, a vulcanizing agent, a vulcanization accelerator, a vulcanization retarder, or combinations thereof (see paragraph 4).

With respect to claim 15, Brothers discloses that the colloidally stabilized latex comprises a crosslinkable monomer, an acidic catalyst, a thermosetting resin, or combinations thereof (see paragraph 13).

With respect to claim 16, Brothers discloses combining a drilling fluid with the sealant composition near a loss-circulation zone, thereby forming a solid mass in the loss-circulation zone (see paragraph 2).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brothers in view of Krishanan (USP 5,900,451).

With respect to claim 3, does not disclose that the protective colloid comprises polyvinylalcohol, a cellulose ether, a natural gum, a synthetic gum, polyacrylic acid, an acrylate, a poly(vinyl alcohol)co(vinyl amine) copolymer, or combinations thereof. Krishnan et al. teaches adding protective colloids, such as polyvinylalcohol, a cellulose ether, a natural gum, a synthetic gum, polyacrylic acid, an acrylate, a poly(vinyl alcohol)co(vinyl amine) copolymer, to a latex because of the rheology and tack properties. It would have been obvious to modify Brothers by adding a protective colloid as noted above, because of the rheology and tack properties of systems with said protective colloids, which increases the tackiness of the emulsion (see column 1 lines 26-30).

With respect to claim 5, Brothers does not disclose that the colloidally stabilized latex comprises an oxyalkylene functional monomer. Krishnan et al. discloses an oxyalkylene monomer in order to add stability to the polymer. It would have been obvious to modify Brothers by including an oxyalkylene monomer as taught by Krishnan et al. in order to add stability to the polymer.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brothers in view of Griffith et al. (USP 6,448,206).

With respect to claim 6, Brothers does not disclose a functionalized silane. Griffith et al. teaches adding a functionalized silane represented by the formula as

claimed by Applicant in order to strengthen the bond between subterranean formations surfaces and the hardened sealing compositions. See column 9 lines 7-20. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Brothers by including a silane as taught by Griffith et al. in order to strengthen the bond between subterranean formation surfaces and the hardened sealing compositions.

1.130 Declaration

6. The declaration filed on 3/28/07 under 37 CFR 1.130 has been considered but is ineffective to overcome the Brothers reference. In order for a declaration under 1.130 to be proper the Applicant must state that the claims in the application and the claims in the published application are not identical but are not patentably distinct. The Applicant has not stated and shown how the claims in the published application are not patentably distinct. Thus, the declaration under 37 CFR 1.130 is not sufficient to overcome the rejections under 35 USC 103.

Response to Arguments

7. Applicant's arguments filed 3/28/07 have been fully considered but they are not persuasive. Applicant argues that the declaration filed under 37 CFR 1.130 overcomes the rejection of claim 7 (now added into claim 1). As noted above, the declaration was not sufficient to overcome the rejection as it does not show that the claims are not patentably distinct. Furthermore, upon reconsideration, the Examiner has determined

that the latex in the Brothers' reference would inherently be stable in the presence of a salt because it is a colloidally stabilized matrix, and thus claim 1 is still anticipated by Brothers. In the alternative, the collodially stabilized matrix taught by Brothers in view of Krishnan et al. would be stable in the presence of a salt as it is substantially identical to the matrix claimed by Applicant.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicole Coy whose telephone number is 571-272-5405. The examiner can normally be reached on M-F 7:30-5:00, 1st F off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

nac

William Neuder
Primary Examiner